comply with the applicable reference control technology requirements in §63.487, the recordkeeping requirements in §63.491, and the reporting requirements in §63.492.

(b) *Aggregate batch vent streams.* Aggregate batch vent streams, as defined in §63.482, are subject to the control requirements for individual batch front-end process vents, as specified in §63.487(b), as well as the monitoring, testing, recordkeeping, and reporting requirements specified in §63.489 through §63.492.

§63.487 Batch front-end process vents—reference control technology.

(a) *Batch front-end process vents.* The owner or operator of a Group 1 batch front-end process vent, as determined using the procedures in §63.488, shall comply with the requirements of either paragraph (a)(1) or (a)(2) of this section. Compliance can be based on either organic HAP or TOC.

(1) For each batch front-end process vent, reduce organic HAP emissions using a flare.

(i) The flare shall comply with the requirements of §63.11(b) of subpart A.

(ii) Halogenated batch front-end process vents, as defined in §63.482, shall not be vented to a flare.

(2) For each batch front-end process vent, reduce organic HAP emissions for the batch cycle by 90 weight percent using a control device. Owners or operators may achieve compliance with this paragraph through the control of selected batch emission episodes or the control of portions of selected batch emission episodes. Documentation demonstrating how the 90 weight percent emission reduction is achieved is required by §63.490(c)(2).

(b) *Aggregate batch vent streams.* The owner or operator of an aggregate batch vent stream that contains one or more Group 1 batch front-end process vents shall comply with the requirements of either paragraph (b)(1) or (b)(2) of this section. Compliance can be based on either organic HAP or TOC.

(1) For each aggregate batch vent stream, reduce organic HAP emissions using a flare.

(i) The flare shall comply with the requirements of §63.11(b) of subpart A.

(ii) Halogenated aggregate batch vent streams, as defined in §63.482, shall not be vented to a flare.

(2) For each aggregate batch vent stream, reduce organic HAP emissions by 90 weight percent on a continuous basis using a control device.

(c) *Halogenated emissions.* Halogenated Group 1 batch front-end process vents, halogenated aggregate batch vent streams, and halogenated continuous front-end process vents that are combusted as part of complying with paragraph (a)(2) or (b)(2) of this section, shall be controlled according to either paragraph (c)(1) or (c)(2) of this section.

(1) If a combustion device is used to comply with paragraph (a)(2) or (b)(2) of this section for a halogenated batch front-end process vent or halogenated aggregate batch vent stream, the emissions shall be ducted from the combustion device to an additional control device that reduces overall emissions of hydrogen halides and halogens by 99 percent before those emissions are discharged to the atmosphere.

(2) A control device may be used to reduce the halogen atom mass emission rate to less than 3,750 kg/yr for batch front-end process vents or aggregate batch vent streams and thus make the batch front-end process vent or aggregate batch vent stream nonhalogenated. The nonhalogenated batch front-end process vent or aggregate batch vent stream must then comply with the requirements of either paragraph (a) or (b) of this section, as appropriate.

(d) If a boiler or process heater is used to comply with the percent reduction requirement specified in paragraph (a)(2) or (b)(2) of this section, the batch front-end process vent or aggregate batch vent stream shall be introduced into the flame zone of such a device.

(e) *Combination of batch front-end process vents or aggregate batch vent streams with continuous front-end process vents.* A batch front-end process vent or aggregate batch vent stream combined with a continuous front-end process

vent stream is not subject to the provisions of §§63.488 through 63.492, providing the requirements of paragraphs (e)(1), (e)(2), and either (e)(3) or (e)(4) of this section are met.

(1) The batch front-end process vent is combined with a continuous front-end process vent prior to routing the continuous front-end process vent to a control or recovery device. In this paragraph, the definitions of control device and recovery device as they relate to continuous front-end process vents shall be used.

(2) The only emissions to the atmosphere from the batch front-end process vent or aggregate batch vent stream prior to being combined with the continuous front-end process vent are from equipment subject to and in compliance with §63.502.

(3) If the batch front-end vent stream or aggregate batch vent stream is combined with a continuous front-end process vent stream prior to being routed to a control device, the combined vent stream shall comply with the requirements in §63.485(m). In this paragraph, the definition of control device as it relates to continuous front-end process vents shall be used.

(4) If the batch front-end process vent or aggregate batch vent stream is combined with a continuous front-end process vent stream prior to being routed to a recovery device, the combined vent stream shall comply with the requirements in §63.485(n). In this paragraph, the definition of recovery device as it relates to continuous front-end process vents shall be used.

(f) *Group 2 batch front-end process vents with annual emissions greater than or equal to the level specified in §63.488(d).* The owner or operator of a Group 2 batch front-end process vent with annual emissions greater than or equal to the level specified in §63.488(d) shall comply with the provisions of paragraphs (f)(1) and (f)(2) of this section.

(1) Establish a batch cycle limitation that ensures that the Group 2 batch front-end process vent does not become a Group 1 batch front-end process vent, and

(2) Comply with the recordkeeping requirements in §63.491(d)(2), and the reporting requirements in §63.492(a)(3) and (b).

(g) *Group 2 batch front-end process vents with annual emissions less than the level specified in §63.488(d).* The owner or operator of a Group 2 batch front-end process vent with annual organic HAP emissions less than the level specified in §63.488(d), shall comply with either paragraphs (g)(1) and (g)(2) of this section or with paragraphs (f)(1) and (f)(2) of this section.

(1) Establish a batch cycle limitation that ensures emissions do not exceed the appropriate level specified in §63.488(d), and

(2) Comply with the recordkeeping requirements in §63.491(d)(1), and the reporting requirements in §63.492(a)(2), (b), and (c).

§63.488 Methods and procedures for batch front-end process vent group determination.

(a) *General requirements.* Except as provided in paragraph (a)(3) of this section, the owner or operator of batch front-end process vents at affected sources shall determine the group status of each batch front-end process vent in accordance with the provisions of this section. This determination may be based on either organic HAP or TOC emissions.

(1) The procedures specified in paragraphs (b) through (i) shall be followed for the expected mix of products for a given batch front-end process vent, as specified in paragraph (a)(1)(i) of this section, or for the worst-case HAP emitting batch unit operation, as specified in paragraphs (a)(1)(ii) through (a)(1)(iv) of this section. ''Worst-case HAP emitting product'' is defined in paragraph (a)(1)(iii) of this section.

(i) If an owner or operator chooses to follow the procedures specified in paragraphs (b) through (i) of this section for the expected mix of products, an identification of the different products and the number of batch cycles accomplished for each is required as part of the group determination documentation.

(ii) If an owner or operator chooses to follow the procedures specified in paragraphs (b) through (i) of this section for the worst-case HAP emitting product, documentation identifying the